TESTIMONY OF JIM MONTGOMERY

PRESIDENT & CHIEF EXECUTIVE OFFICER

TULANE UNIVERSITY HOSPITAL AND CLINIC

BEFORE THE

OVERSIGHT AND INVESTIGATIONS SUBCOMMITTEE

OF THE

HOUSE COMMITTEE ON ENERGY AND COMMERCE

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Mr. Chairman, members of the Committee and staff – good morning. My name is Jim Montgomery, and I am the President and CEO of Tulane University Hospital and Clinic ("TUHC"). TUHC serves as the teaching hospital for Tulane University Medical School, and operates as a partnership between Tulane University Medical Group and HCA, Inc. ("HCA").

TUHC comprises three facilities in the New Orleans metropolitan area. Our main campus is a 235-bed tertiary-care facility in downtown New Orleans. Our secondary campus is the 119-bed Tulane-Lakeside Hospital in Metairie, LA ("Lakeside"). We also operate the DePaul Tulane Behavioral Health Center, a 110-bed psychiatric hospital located in uptown New Orleans ("DePaul"). Among these three campuses, TUHC aims to provide a full range of medical services, including inpatient rehabilitation.

As the Committee undoubtedly is aware, Hurricane Katrina inflicted heavy damage on TUHC's main campus, and damage to Lakeside and DePaul sufficient to close each facility for a period of time. The main downtown building currently is closed, and we are several months from the resumption of full operations. Yet, I use the present tense to speak of HCA's presence in the New Orleans area, because I have great confidence in our rebuilding process. In fact, we already have made significant progress toward that goal. HCA's Lakeview Regional Medical

Center, a separate HCA-operated facility located in Covington, Louisiana, never closed. Lakeside resumed full operations within weeks of the storm. At the main campus of TUHC, which suffered greatest damage, we have completed the remediation of safety and environmental hazards, and the Emergency Department has been renovated. All told, our Tulane facilities have received over 14,000 patient visits since Hurricane Katrina unleashed its destruction last summer. TUHC has achieved so much, and I have faith that we will achieve much more in the long months ahead.

As President and Chief Executive Officer, I have overseen the formulation of TUHC's policies and procedures for emergency preparedness management. I also witnessed the Plan's implementation – before, during, and in the aftermath of Hurricane Katrina. I appreciate the opportunity to come before you this morning to discuss my experiences, both in terms of emergency preparedness and emergency management.

I. TUHC'S EMERGENCY PREPAREDNESS MANAGEMENT PLAN

Long before Hurricane Katrina struck New Orleans, TUHC had developed its Emergency Preparedness Management Plan – a comprehensive document establishing operating procedures for emergency preparedness and crisis management (the "Plan"). Our Plan details both general emergency processes, as well as specific policies dealing with disasters, ranging from severe weather to biological and chemical terrorism. I would like to speak first about TUHC's general emergency plan, which may be divided into four distinct phases: (i) activating the chain of command; (ii) mobilizing emergency personnel; (iii) maintaining emergency equipment and supplies; and (iv) establishing communications with the appropriate authorities, both internal and outside the hospital.

A. *Activating the Chain of Command*

When faced with a threatened emergency, I am responsible for deciding whether to implement the Emergency Preparedness Management Plan. In my absence, the Chief Operating Officer (COO), Kim Ryan, possesses the authority to make the decision. Once the Plan is executed, our next step is to establish a local Command Center, comprised of nine individuals: (i) the CEO and COO, who are responsible for overall coordination and decision-making; (ii) the Chief Medical Officer, Chief Nursing Officer, Clinic Representative, and Public Relations Officer, who are responsible for ensuring the continuity of medical operations at the main TUHC campus; and (iii) the Director of Facility Services, Hospital Safety Officer, and TUHC Police Director, who are responsible for protecting the physical integrity of TUHC buildings in downtown New Orleans. In the event of an emergency, Lakeside, DePaul and the TUHC campuses each establish their own local Command Centers to monitor their respective preparedness and response.

B. *Mobilizing Emergency Personnel*

The TUHC Command Center uses a coding system to alert in-house staff to emergencies. For example, Code Orange means that either an internal or external disaster has occurred, and that TUHC immediately should implement the Emergency Preparedness Management Plan. Code CD means that TUHC may experience civil disturbance, and that TUHC staff should execute the appropriate policies. Typically, the TUHC Command Center announces these codes through the facility-wide speaker system.

Depending on the type and the severity of the emergency, the Command Center may summon off-duty staff to the hospital. To enable the Command Center to reach such staff, the Plan requires that TUHC departments maintain a list of employee home and pager numbers. Each department updates this call-in list on an annual basis. The Plan also requires essential

staff to contact their supervisors and await further instructions, even if they are off-duty and have learned of an emergency through third-party sources, such as the media.

C. *Maintaining Emergency Equipment and Supplies*

TUHC's Emergency Preparedness Management Plan anticipates that public utilities may fail during an emergency. To ensure that critical areas and systems continue to operate, we have acquired stationary and portable emergency generators to ensure power, portable suction machines to provide vacuum, and portable cylinders to supply medical gases. We have stockpiled potable water in bottles, and we can store non-potable water in containers, sinks, and tubs. TUHC even has purchased bells for patients to call nurses in the event of a power disruption. According to the Plan, departments responsible for medical care during an emergency create checklists of necessary medical supplies, and procure any that they find lacking.

D. *Communicating with Governmental Authorities and HCA*

The Plan also provides for contingencies in the event that communication networks fail during an emergency. If this occurs, our Command Center communicates with governmental authorities using the Hospital Emergency Area Radio ("HEAR") network. And if HEAR fails, the Command Center may resort to use of our telecommunications system, which is connected to emergency generators in order to ensure back-up power. TUHC police communicate using two-way radios, which are configured to ensure that they will not fail in the event of an emergency.

As I mentioned before, TUHC is part of the HCA network of healthcare providers. Accordingly, like all HCA facilities, TUHC incorporated the Hospital Emergency Incident Command System ("HEICS") into our emergency planning. HEICS is a model utilized nationally by numerous industries and communities to establish an "all-hazards" command structure within the hospital (or other business), and it has helped HCA to activate a clear chain

of command during an emergency. The use of HEICS as a common platform allows those engaged in a disaster to link communications with the command structure of multiple communities. Additionally, the structure's training and implementation results in multiple individuals' being prepared to assume an appropriate position within the command center.

For example, the role of commander within the command center during an emergency may be filled by the CEO or the COO, allowing both comparatively-trained individuals to serve on a rotating basis across an extended period of time. HEICS also provides a common vocabulary to use when communicating with the corporate Command Center at HCA headquarters, as well as other affiliated hospitals, and the communities that we serve. Both the command structure and the common vocabulary proved valuable in the wake of Hurricane Katrina, when TUHC turned to HCA's Corporate Disaster Team ("CDT") and other HCA hospital and organizational staff for support in navigating the unimaginable devastation.

II. TUHC'S SEVERE WEATHER PROGRAM AND TOTAL FACILITY EVACUATION PLAN

Before relating my experiences with Hurricane Katrina, I would like briefly to describe TUHC's Severe Weather Program (the "Program"), which outlines specific policies to deal with adverse weather conditions. Given our location in downtown New Orleans, hurricanes obviously have been our primary concern. With respect to hurricane preparedness, our Program is divided into six stages for disaster mitigation.

The First Stage extends from December 1st to May 31st, which falls outside the Gulf Coast's official hurricane season. During this stage, TUHC operates normally, while our Hospital Safety Officer updates the Program and educates employees on compliance with its procedures.

The Second Stage of the Program extends from June 1st to November 30th, which officially comprises hurricane season in the Gulf Coast. During this stage, all TUHC departments are required to review the Program and designate "essential" personnel. In addition, they update employee call-in lists, distributing copies to the Hospital Safety Officer and the hospital operators. All departments also are required to inventory and confirm the quality of necessary emergency supplies.

When the National Weather Service's National Hurricane Center issues a hurricane advisory, we initiate the Third Stage of our Program. During this stage, our COO announces the implementation of the Program's emergency measures. Essential staff and other off-duty personnel remain on standby, and departments are required to complete their supply inventories and arrange for additional deliveries as needed. All departments maintain close contact with the hospital operations personnel.

When the National Hurricane Center issues a hurricane watch, we initiate the Fourth Stage of our Program. During this stage, the COO establishes the local Command Center. Depending on the specific circumstances, the Medical Director may decide to summon off-duty physicians to TUHC. In addition, the Pharmacy Department and Emergency Department are required to inventory supplies of typhoid vaccine, insulin, and snakebite antidotes, and report their results to the Command Center.

When the National Hurricane Center issues a hurricane warning, we initiate the Fifth Stage of our Program. During this stage, the Command Center takes complete control of TUHC operations. To ensure that TUHC has sufficient beds should mass casualties result from the hurricane, the Command Center cancels all scheduled elective surgery and discharges appropriate patients. It also must verify that all departments have completed preparations for the

arrival of the hurricane, including the procurement of supplies, and confirm that the HEAR radio is adequately staffed and operational. The Command Center is responsible for ensuring that sufficient staffing is available for at least two continuous, twelve-hour shifts, as well as establishing a pool of personnel not assigned to particular departments, who can fulfill different responsibilities if necessary.

During the Fifth Stage, nursing staff move remaining patients to interior rooms, which are less prone to wind damage. They would then close drapes and blinds throughout TUHC, and verify that flashlights and fresh batteries are available. Finally, nursing staff fill bathtubs, whirlpools, and other vessels with non-potable water.

The Sixth Stage of our Severe Weather Program takes place immediately after the hurricane. The Command Center must make sure that the communications network still is operational, and then uses the network to fulfill internal and external requests for services and supplies. Assuming that TUHC remains relatively intact, the Command Center may prepare personnel to receive mass casualties. If TUHC has suffered significant structural damage – as was the case following Hurricane Katrina – then the Command Center implements the Total Facility Evacuation Plan. In general, TUHC prioritizes patients for evacuation in the following way: (i) patients in imminent danger from the disaster; (ii) wheelchair and ambulatory patients; (iii) bed-ridden patients; and (iv) patients receiving oxygen. Please note, Mr. Chairman, that this system of classification and priority assumes that TUHC emergency generators are in operation and powering ventilators.

Upon notification of total evacuation, triage physicians and nurses are required to screen patients, placing them in one of the above four categories, and then immediately provide a list of patient classifications to the Command Center and the Nursing Supervisor. Prior to Katrina, the

Total Facility Evacuation Plan anticipated that most patients would be transported by commercially-owned buses. If bus transportation is not feasible, the Plan authorizes TUHC to transport patients using any means available, including vehicles provided by the National Guard, the City of New Orleans, or a state agency. After the Total Facility Evacuation Plan has been completed, nurses or other hospital staff search each room to ensure that no patients, visitors, or employees remain in the building.

III. TUHC'S RESPONSE TO HURRICANE KATRINA

Although Hurricane Katrina wrought unprecedented devastation on the New Orleans region, few accurately predicted the full force of destruction that would be left in its wake. But hurricane response is nothing new to TUHC, and HCA-affiliate hospitals nationwide have contended with natural disasters and emergencies of innumerable kinds. By relying on our Emergency Preparedness Management Plan, Severe Weather Program, and Total Facility Evacuation Plan, TUHC was able to execute an evacuation of nearly two hundred patients, as well as over one thousand employees and families. Although Katrina's scale and volatility forced us to improvise at times, and to rely on the larger HCA network to a greater extent than originally anticipated, in a word – our plans worked.

I would like to conclude my testimony by giving you a day-by-day account of the TUHC downtown campus response to Hurricane Katrina. I then hope to discuss both where the plan worked, and where human ingenuity had to take over.

By Friday, August 26, 2005, Hurricane Katrina had formed as a Category 1 storm moving westward towards Mobile, Alabama. At that time, the National Hurricane Center was predicting that Katrina would strengthen and likely change course, with New Orleans falling within the potential landfall forecasts. As a precautionary measure, TUHC implemented the Fourth Stage of our Severe Weather Program. Accordingly, COO Kim Ryan convened the first

formal Command Center meeting, and we considered TUHC's staffing needs during the hurricane. We also discussed whether TUHC should begin discharging patients. We also contacted the Corporate Command Center at HCA headquarters in Nashville to discuss the status of Hurricane Katrina and TUHC's anticipated needs. At the end of that day, we adjourned the TUHC Command Center meeting, agreeing to meet again at noon the next day. All told, we had followed the Severe Weather Program to the letter.

On Saturday, August 27, 2005, the National Hurricane Center upgraded Hurricane Katrina to a Category 3 storm and calculated that the eye would pass over Alabama or Mississippi. Given our continued proximity to the predicted storm track when we reconvened the Command Center at noon, we initiated the Fifth Stage of the Program. At this point, we began to operate the Command Center on a 24-hour basis, and began to make provisions at the hospital for sheltering employees and families. We determined which employees would be asked to staff each of two continuous, twelve-hour shifts, and the Chief Medical Officer requested that physicians identify patients ready to be discharged. We also contacted HCA headquarters and obtained an additional portable emergency generator. By the end of the day, we had completed about half of the duties mandated by the Fifth Stage of the Program.

On Sunday, August 28, 2005, the National Hurricane Center upgraded Hurricane Katrina to a Category 5 storm and refined its landfall prediction to the border between Louisiana and Mississippi. We continued Fifth Stage preparations. TUHC physicians and staff arrived at 6:30 a.m., according to Plan, and the Command Center conducted a staff briefing on emergency procedures prior to the start of each shift. In anticipation of possible flooding, we relocated the Emergency Department and the Central Sterile Supply unit to the 3rd floor of the building. We also moved food, water, and other medical supplies to a more secure location on the 5th floor.

TUHC staff identified the number of patients on life support – at that point, we had eleven ventilator patients, none using oscillators, and two patients dependent on heart pumps (BVAD). We made our first improvisation from the Plans by moving patients on life support to the 4th floor, where we set up gas-powered portable generators. Should our main emergency generators fail, we wanted the ability to connect the patients to portable generators as rapidly as possible. We even were prepared to feed the portable generators with gasoline from our cars, if necessary.

Late on Sunday afternoon, government officials requested that we provide space for fifty-eight hurricane victims with special needs, who were housed at the Superdome. A significant number required oxygen or otherwise were medically fragile, potentially placing them at risk in the event of structural damage to the facility. Nevertheless, we agreed to house them at TUHC. These individuals also were expected to arrive accompanied by a federal Disaster Medical Assistance Team (DMAT), able to provide any necessary medical care and additional supplies. However, the DMAT encountered delays at Baton Rouge, so we immediately assembled a group of Internal Medicine physicians to assess their medical condition.

At roughly 3:00 a.m. on Monday, August 29, 2005, Hurricane Katrina made landfall in Louisiana as a Category 4 storm, with hurricane-force winds battering the hospital. We lost power at about 6:00 a.m., but the emergency generators immediately began operating. By around noon, the winds began to subside, so TUHC staff inspected the outside of the downtown building. We found only minor roof damage and a few broken windows. Better yet, it appeared that the flooding was limited. Based upon the immediate post-storm assessment, and in order to maximize the facility's patient-care resources, the Command Center decided to move the Emergency Department back to the 1st floor, and as required by the Sixth Stage of the Severe Weather Program, we prepared for the arrival of hurricane casualties.

Unfortunately, our jubilation on Monday afternoon was short-lived. By 9:30 p.m., the Director of Facility Services notified the TUHC Command Center that New Orleans was flooding at a rate of one inch every ten to fifteen minutes. By midnight, we realized that we had no idea when – or if – the flooding would stop. And despite our best planning efforts, systemic failures of the regional and national communications systems caused significant disruptions in our ability to maintain communications with outside individuals and entities. Without the means to obtain reliable current information, the Command Center decided to return the Emergency Department to the 3rd floor, along with the Central Sterile Supply, Pharmacy, and Materials Management units.

On Tuesday, August 30, 2005, the Command Center discovered that the flooding threatened our emergency generators. In fact, notwithstanding the prospect of flood damage, we had depended on the generators since Monday and projected that they would provide at best another two to three hours of emergency power. At that point, I decided that we must evacuate our most critically-ill patients. At around 3:00 a.m., we contacted HCA headquarters and Acadian Ambulance in order to coordinate a helicopter evacuation. Since the designated area at TUHC for helipad services had flooded, the Command Center decided to employ the roof of the Saratoga Parking Garage as the best alternative helicopter landing site. Personnel from the TUHC Facilities Department prepared the roof by removing four light poles.

Once the decision was reached to initiate a total facility evacuation, the Command Center asked the Chief Medical Officer and her staff to assign evacuation priorities to all remaining patients, without distinguishing between TUHC patients and those from the Superdome. First, we evacuated the neonates and the patients in our Pediatric Intensive Care Unit on ventilator support. We then determined that patients on ventilator support would be most vulnerable

should emergency generators fail. Accordingly, we deviated from the priorities established by the Total Facility Evacuation Plan, evacuating the adults on ventilator support next. The third group to be evacuated would be the remaining critical care patients, except for the two patients on heart pumps (BVAD). They were to be followed by the pediatric and adult patients needing urgent medical or surgical care. The final evacuation group was to include all remaining patients. After determining the evacuation priority, we then tried to locate ambulatory pumps and helicopters with high weight limits, since two patients were connected to heart pumps weighing over 500 pounds.

At noon on Tuesday, we began the helicopter evacuation of our first priority patients. The Command Center staff, coordinating with HCA headquarters, identified and secured receiving facilities for our evacuees. The Command Center also determined which staff members needed to accompany patients during the evacuation. All afternoon and well into the night, we continually evacuated patients, briefly halting flights only when the Command Center received reports of gunshots.

We lost emergency generator power between 5:30 and 6:00 p.m. Thankfully, by then we already had evacuated all of the ventilator patients, and we immediately hooked up the two heart pump patients to the portable generators located on the 4th floor. At around 7:00 p.m., we lost all reliable telephone communication. We then decided to split the Command Center into two functioning organizations. The Clinical Care Command Center relocated to the Deming Pavilion, which was powered by a portable generator. The Administrative Command Center relocated to the Lab Conference Room, enabling communications through incoming calls on the hospital's "brown phones" – analog telephones that are hard-wired to BellSouth, not routed through the TUHC digital switch. The two Command Centers were able to communicate with

each other, and with the roof of the Saratoga Parking Garage, through two-way radios. Neither Command Center had a dependable means to make outgoing local or long-distance calls, however, so we were forced to rely on sporadic mobile phone and Blackberry service, as well as calling cards on pay phones.

On Wednesday, August 31, 2005, the HCA-chartered helicopters arrived to supplement the evacuation process. HCA headquarters also provided satellite phones, food, water, medical supplies, and bulletproof vests. After TUHC evacuated all second and third priority patients, we started taking into account the configuration of the helicopters to determine further evacuation priority. For example, if the helicopter was configured for stretchers, we would evacuate patients on stretchers. If the helicopter was configured with seats, we would evacuate ambulatory patients. At some point during the morning, the Louisiana Department of Wildlife and Fisheries arrived with boats to assist with the evacuation of ambulatory Superdome patients and their families. In the afternoon, we received a request from Charity Hospital and evacuated four of their critically-ill patients, each of whom had already been hand-ventilated for two days. By the end of the day on Wednesday, TUHC had evacuated around 160 patients in thirty-six hours. Only nineteen patients remained, including a bariatric patient weighing over six-hundred pounds, and a cardiac patient connected to a 500-pound heart pump.

On Thursday, September 1, 2005, we evacuated the nineteen remaining TUHC patients. This group included non-ambulatory patients, who our staff carried flight after flight, down darkened stairwells in oppressive heat. Two remaining evacuees posed particular logistical challenges – a heart-pump patient, whose survival depended upon more than five hundred pounds of medical equipment, and the 600-pound bariatric patient. In addition, TUHC evacuated dozens of additional patients who were transported that morning from Charity Hospital. At all

times, patient evacuation was our priority. When arriving helicopters reached their capacity for additional patients, or were not configured to accommodate patient transport, we filled any available space with hospital staff and family members. No space was wasted. Helicopters took staff to an airport staging area, where they were decontaminated and placed on buses headed for Lafayette, LA. At the end of Thursday, about four hundred TUHC employees and family members still awaited evacuation. At the suggestion of TUHC police, we all slept in the Saratoga Parking Garage, making it easier to secure the premises. By nightfall on Friday, all TUHC employees were en route to Lafayette, LA.

Thank you, Mr. Chairman and members of the Committee for your time and attention. I will be happy to respond to any questions.